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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,865	05/10/2001	Bradley M. Hiben	CM04756H	5153

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EXAMINER
LEE, JOHN J

ART UNIT	PAPER NUMBER
2682	

DATE MAILED: 08/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PRL

Office Action Summary	Application No. 09/852,865	Applicant(s) HIBEN ET AL.	
	Examiner JOHN J LEE	Art Unit 2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1 – 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleider et al. (US Patent number 6,084,919) in view of Rotstein et al. (6,289,228).

Regarding **claim 1**, Kleider discloses that a method comprising a receiving device performing the steps of:

receiving a transmitted signal comprising a plurality of sub-channels (Fig. 3 and 4 teach a plurality of sub-channels) (Fig. 2, 3, column 5, lines 21 – column 6, lines 67, and column 9, lines 46 – column 10, lines 34);

operating in a first decoding mode to decode (140 in Fig. 10) one or more sub-channels of the plurality of sub-channels, thereby yielding control information (line 40 in Fig. 2)(Fig. 2, 3, 4, 10 and column 11, lines 38 – column 13, lines 11);

if the control information includes indicia of quality metrics directed to the receiving device, operating in a second decoding mode to decode one or more additional sub-channels of the plurality of sub-channels, thereby yielding data information (Fig. 2, 3, 9, 10, column 11, lines 38 – column 13, lines 11, and column 8, lines 3 – column 9, lines 21).

Kleider does not specifically disclose the limitation "the control information includes indicia of payload (data) information that the data information is yielded from decoding the sub-channel when the device operates in the second mode". However, Rotstein discloses "the control information includes indicia of payload information that the data information is yielded from decoding the sub-channel when the device operates in the second mode" (abstract, Fig. 3, and column 7, lines 5 – column 9, lines 19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Kleider system as taught by Rotstein. Doing so would enhance data reception in a communication device to reduce the power consumption.

Regarding **claim 2**, Kleider discloses that in the first decoding mode, the receiving device decodes payload sub-channels that include the control information (Fig. 2 3, 10 and column 11, lines 38 – column 13, lines 11).

Regarding **claim 3**, Kleider discloses that in the first decoding mode, the receiving device decodes only designated control sub-channels (Fig. 2 3, 10 and column 11, lines 38 – column 13, lines 11).

Regarding **claim 4**, Kleider discloses that in the second decoding mode, the receiving device decodes the control sub-channels and the one or more additional sub-channels (Fig. 2, 3, 9, 10, column 11, lines 38 – column 13, lines 11, and column 8, lines 3 – column 9, lines 21).

Regarding **claim 5**, Kleider and Rotstein disclose all the limitation, as discussed in claim 1. Furthermore, Kleider further discloses that sending control information, from a sending device to a receiving device, in one or more control sub-channels of the M

sub-channels occupying a first portion of the bandwidth B_M (Fig. 2, 3, 4, 10, column 2, lines 11 – column 3, lines 4, and column 8, lines 4 – column 9, lines 57).

Regarding **claim 6**, Kleider discloses that the sending device is a base station and the receiving device is a radio communication unit (Fig. 1, 2 and column 2, lines 11 – column 3, lines 61).

Regarding **claim 7**, Kleider and Rotstein disclose all the limitation, as discussed in claim 1.

Regarding **claim 8**, Kleider discloses that the step of decoding the control sub-channels comprises the receiving device decoding only the control sub-channels (Fig. 2, 3, 10 and column 11, lines 38 – column 13, lines 11).

Regarding **claim 9**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 5. Furthermore, Kleider further discloses that sending the data information to the receiving device in one or more data sub-channels of the M sub-channels occupying a second portion of the bandwidth B_M (Fig. 2, 3, 4, 10, column 8, lines 4 – column 9, lines 57, and column 11, lines 38 – column 13, lines 11).

Regarding **claim 10**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 9.

Regarding **claim 11**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 9. Furthermore, Kleider further discloses that the step of decoding the data sub-channels comprises the receiving device decoding the full bandwidth B_M (column 8, lines 4 – column 9, lines 57 and Fig. 2, 10).

Regarding **claim 12**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 9.

Regarding **claim 13**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 9. Furthermore, Kleider further discloses that determining, by the sending device, if the payload information can be communicated via the control sub-channels (Fig. 2, 10, column 4, lines 13 – column 6, lines 67, and column 7, lines 23 – column 8, lines 55).

Regarding **claim 14**, Kleider and Rotstein disclose all the limitation, as discussed in claim 1. Furthermore, Kleider further discloses that decoding, by the receiving device, the control sub-channels to receive the data information (Fig. 2, 3, 9, 10 and column 11, lines 38 – column 13, lines 11).

Regarding **claim 15**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 8.

Regarding **claim 16**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 9.

Regarding **claim 17**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 10.

Regarding **claim 18**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 11.

Regarding **claim 19**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 12.

Regarding **claim 20**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 5. Furthermore, Kleider further discloses that an antenna for receiving a transmitted signal comprising M sub-channels (Fig. 1, 2, 9, 10 and column 11, lines 38 – column 13, lines 11).

Regarding **claim 21**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 3.

Regarding **claim 22**, Kleider and Rotstein disclose all the limitation, as discussed in claims 1 and 4.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jones et al. (US Patent number 6,307,892) discloses Multicarrier Communication System and Method for Peak Power Control.

Cimini et al. (US Patent number 5,914,933) discloses Clustered OFDM Communication System.

Sekine et al. (US Patent number 5.694,429) discloses Mobile Radio Communication System.

Any response to this action should be mailed to:

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or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(703) 306-5936**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached on **(703) 308-6739**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
August 8, 2002

John J Lee

VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
8/12/02